

CLAIMS

What is claimed is:

- 1 1. A system comprising:
2 a threshold detector circuit;
3 a first switching circuit for enabling access to a back-up power source, the first
4 switching circuit comprising at least a first transistor; and
5 wherein the threshold detector is configured to cause the first switching circuit
6 to enable access to the back-up power source responsive to a voltage
7 provided by a primary power source dropping below a predetermined
8 threshold.
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- 1 2. The system of claim 1, further comprising:
2 a second switching circuit for enabling access to a primary power source, the
3 second switching circuit comprising at least one transistor.
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- 1 3. The system of claim 2, wherein the threshold detector is configured to cause
2 the second switching circuit to enable access to the second power source
3 responsive to a voltage provided by a primary power source rising above the
4 predetermined threshold.
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- 1 4. The system of claim 1, further comprising:
2 an inverting switch coupled between the first switching circuit and the
3 threshold detector.
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- 1 5. The system of claim 4, wherein the inverting switch comprises at least one
2 transistor.
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- 1 6. The system of claim 4, further comprising:
2 an inverter coupled between the inverting switch and the threshold detector.
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- 1 7. The system of claim 6, wherein the inverter comprises a comparator.
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- 1 8. The system of claim 1, wherein the first switching circuit comprises a second
2 transistor coupled to the first transistor.
1 .
- 1 9. The system of claim 8, wherein an emitter of the first transistor is coupled to a
2 collector of the second transistor.
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- 1 10. The system of claim 9, wherein current flow between respective collectors and
2 emitters of the first and second transistors terminates access to the back-up
3 power source.
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- 1 11. The system of claim 9, wherein resistance to current flow between respective
2 collectors and emitters of the first and second transistors enables access to the
3 back-up power source.
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- 1 12. A method comprising the steps of:
2 detecting a primary voltage dropping below a predetermined threshold;
3 enabling at least a first transistor to provide access to a back-up voltage
4 responsive to detecting the drop in the primary voltage.
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- 1 13. The method of claim 12, further comprising:
2 enabling at least a second transistor to terminate access to the primary voltage
3 responsive to detecting the drop in the primary voltage.
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- 1 14. The method of claim 12, further comprising:
2 detecting the primary voltage rising above the predetermined threshold;
3 enabling at least a second transistor to provide access to the primary voltage
4 responsive to detecting the rise in the primary voltage.
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1 15. The method of claim 14, further comprising:

2 enabling the at least first transistor to terminate access to the back-up voltage
3 responsive to detecting the rise in the primary voltage.

1 16. A system comprising:

2 means for detecting a primary voltage dropping below a predetermined
3 threshold;

4 means for enabling at least a first transistor to provide access to a back-up
5 voltage responsive to detecting the drop in the primary voltage.

1 17. The system of claim 16, further comprising:

2 means for enabling at least a second transistor to terminate access to the
3 primary voltage responsive to detecting the drop in the primary
4 voltage.

1 18. A system comprising:

2 a threshold detector circuit;

3 a first switching circuit for enabling access to a back-up power source, the first
4 switching circuit comprising at least a first transistor;

5 a second switching circuit for enabling access to a primary power source, the
6 second switching circuit comprising at least one transistor;

7 an inverting switch coupled between the first switching circuit and the
8 threshold detector; and

9 an inverter coupled between the inverting switch and the threshold detector;

10 wherein the threshold detector is configured to cause the first switching circuit
11 to enable access to the back-up power source responsive to a voltage
12 provided by a primary power source dropping below a predetermined
13 threshold; and

14 wherein the threshold detector is configured to cause the second switching
15 circuit to enable access to the second power source responsive to a
16 voltage provided by a primary power source rising above the
17 predetermined threshold.

1 19. A threshold detection circuit for enabling access to a back-up power source,
2 comprising:
3 a comparator having a first input connection for receiving a first input
4 voltage, a second input connection for receiving a second input
5 voltage, and an output connection for providing an output
6 voltage;
7 a first resistor and a first capacitor that are coupled in series between
8 the first input connection and the output connection; and
9 a second resistor that is coupled between the first input connection and
10 the output connection, and that is coupled in parallel to the
11 series of first resistor and the first capacitor.

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1 20. The threshold detection circuit of claim 19, wherein the threshold detection
2 circuit is configured to cause a first switching circuit to enable access to the back-up
3 power source responsive to a voltage provided by a primary power source dropping
4 below a predetermined threshold.